

REMARKS

Claims 1-18 are presented for further examination. Claims 1 and 10 have been amended. Claims 17 and 18 are new.

In the final Office Action mailed April 21, 2004, the Examiner rejected claims 1-6 and 8-12 under 35 U.S.C. § 102(a) as anticipated by Michael J. Gay, "Digitally Controlled Video Processor With Accurate Grey-Scale," *IEEE Transactions on Consumer Electronics* 38(2): 91-100, May 1, 1992 ("Gay"). Claims 7 and 13 were found to be allowable if rewritten into independent form, and claims 14-16 were allowed.

Applicants respectfully disagree with the basis for the rejection of claims 1-6 and 8-12 and request reconsideration and allowance of the claims.

As disclosed in the specification of the pending application, a speeding comparator is employed and utilizes six parallel comparators arranged with different comparison voltages spread over an operative range in order to detect not only the direction for correction (up or down) but also to determine the speed of correction. When the difference between the detected output and the reference output is great, the speeding logic circuit modifies a counter to provide a choice of three speeds to count up (+1 or +2 or +4 bit field) and a choice of three speeds to count down (-1 or -2 or -4 bit field) as shown in Table 1 of the present application.

In contrast, Gay discloses the use of only two comparators, one for each direction, *i.e.*, too high or too low. Thus, Gay discloses only a single set of comparators while in the present application at least three sets of comparators are used in order to quantify how much higher or lower the loop is from a stable condition.

In addition, Gay is directed to a beam current limiter that utilizes a single speed for counting up and a single speed for counting down. Moreover, Gay teaches an asymmetrical time constant, *i.e.*, a single high speed for one direction and a single low speed for the opposite direction. In contrast, the present invention requires a similar range of speed in both directions because it is applied to a cutoff control circuit.

Turning to the claims, claim 1 recites, *inter alia*, the speeding logic circuit having an input coupled to an output of a speeding comparator and further having an output coupled to an input

of a counter circuit and arranged to control the counting rate of the counter circuit according to the measure of a difference in display driver current to provide a variable up counting rate and a variable down counting rate. As discussed above, nowhere does Gay teach or suggest a variable up counting rate and a variable down counting rate. Rather, Gay specifically teaches a nonvariable single rate for each direction. Moreover, Gay does not teach or suggest a plurality of sets of comparator circuits in a speeding comparator. Rather, Gay specifically teaches the use of a single set of comparators and hence does not have the ability for determining the speed at which a counter is to count up or down.

In view of the foregoing, applicants respectfully submit that claim 1, as well as dependent claims 2-9, are clearly allowable over the reference cited and applied by the Examiner.

Claim 10 likewise recites the speeding logic circuit as providing a variable up counting rate and a variable down counting rate to the counter circuit on the basis of the output of the speeding comparator circuit. Applicants respectfully submit that claim 10 and all claims depending therefrom are clearly allowable over the Gay reference for the reasons discussed above with respect to claim 1.

New claims 17 and 18 are allowable claims 7 and 13, respectively, rewritten into independent form. Applicants submit that claims 17 and 18 are clearly allowable because dependent claims 7 and 13 have been found to be allowable if rewritten into independent form.

In view of the foregoing, applicants submit all of the claims in this application are clearly in condition for allowance. In the event the Examiner disagrees or finds minor informalities, the Examiner is urged to contact applicants' undersigned representative by telephone at (206) 622-4900 in order to expeditiously resolve prosecution of this application. In any event, the Examiner is requested to enter the foregoing amendments in order to better place the application in condition for appeal.

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Reply to Office Action dated April 21, 2004

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

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